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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/555,266	11/01/2005	**Peter Fuhrmann**	DE 030145	9354

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EXAMINER	
BARON, HENRY	

ART UNIT	PAPER NUMBER
2616	

NOTIFICATION DATE	DELIVERY MODE
03/24/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No.	Applicant(s)	
	10/555,266	FUHRMANN ET AL.	
	Examiner	Art Unit	
	HENRY BARON	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 November 2005 and 11/1/05*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 November 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTIONS

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> a. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 3 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belschner, et al (U.S. Patent 7103805), in view of in view of Riley et al (U.S. Patent 5706289).

3. In consideration of claims 1 and 11, Belschner teaches of a bus driver and a network node with a communication unit, which is provided for the implementation of a communication protocol for the purpose of communication with other network nodes via a communication medium, and with a bus monitor, which, mutually independently, each implement an access time schedule contained in a configuration data record, and which each make available, in accordance with the access time schedule, a release signal for a bus driver provided in the network node, which evaluates these two signals and, in the event that the two release signals do not coincide, blocks the access of the network node to the communication medium. (1: [0009] read ..invention relates to a central node for a data bus system having a bus monitor unit with a receiver for registering the signals on the data bus, and evaluation means which detect a faulty communication on the data bus, and at least temporarily block communication by the user i.e. other network nodes with a communication unit, causing the faulty communication 4: [0056] read [t]he bus monitor unit is connected via an interface to a communications computer of the central node, which loads and calculates the time patterns i.e. access time schedule contained in a configuration data record, for the accepted transmission slots of the individual users i.e. communication nodes. The interface is a component of the configuration means and 6: [0051] read [t]he trigger signals i.e. release

signal for a bus driver, are calculated from the predefined time patterns which can be set using the configuration means and configuration parameters. The time patterns, which are predetermined by a unit 21 for setting the configuration parameters, are correspondingly evaluated by means of a communications controller .. and the bus monitor unit 5, in order to generate trigger signals and 5: [0047] read .. a bus driver can either transmit or receive at one time.)

4. With regards to claim 3, Belschner, modified Riley teaches of a network node as claimed in claim 1, characterized in that the release signals of the communication unit and the bus monitor, but does not teach that the signals are coded inversely to one another.

5. The polarities of signals in VLSI are determined by the physical design, timing and performance specification of the logic as shown in, for example, in Riley Figure 13 element 445 and 446.

6. It would have been obvious at the time the invention was made by a person of to having ordinary skill in the art to modify the teachings of Belschner, modified Riley so that release signals are coded inversely to one another if the design so dictated.

7. In this manner, the time slot of bus could be blocked or not in the most expedient manner per a specific set of physical specifications.

8. In regards to claims 4 – 5, Belschner modified by Riley, teach a network node characterized in that the evaluation of the two release signals is undertaken in the bus driver, but does not teach the of the influence of a low-pass filter or of a low-pass filter of configurable design.

9. Riley teaches of the evaluation of the two signals is undertaken in the bus driver with the influence of a low-pass filter or of a low-pass filter of configurable design. (2: [0012] read shown in block form in FIG. 2A, the channel input signal at the channel A input terminal to the integrated circuit is fed through a dual signal conditioning circuit before further processing. The signal conditioning circuit includes a Channel A signal conditioning circuit (shown in FIG. 3A) i.e. configurable low-pass filter. As

shown in FIG. 3A, the signal conditioning circuit 122 has an anti-aliasing filter, a hysteresis circuit, and a digital low pass filter.)

10. It would have been obvious at the time the invention was made by a person of to having ordinary skill in the art to modify the teachings of Belschner, modified Riley to condition the input release signal with a configurable low pass filter.

11. In this manner, noise or channel transients can be mitigated thus improving the fidelity of the protection time slot logic for the bus.

12. In regards to claims 6 and 7, Belschner teaches that error-state detection generated in the bus driver is resettable from the outside and can be signaled to the outside. (4: [0056] read [t]he bus monitor unit is connected via an interface to a communications computer of the central node, which loads and calculates the time patterns i.e. access time schedule contained in a configuration data record, for the accepted transmission slots of the individual users i.e. communication nodes. The interface is a component of the configuration means).

13. Regarding claim 8, Belschner teaches that the bus monitor and the bus driver are integrated into one unit. (2: [0045] read the bus monitor unit is integrated into the central node is suitable for monitoring access of users to the data bus, without having to install the bus monitor unit in a decentralized controller for this purpose.).

14. In consideration of claim 9, Belschner teaches a network with network nodes where the network nodes communicate with each other via the communication medium. (Figure 1 element 6).

15. With regards to claim 10, Belschner teaches where redundant network channels are provided, wherein a bus monitor and a bus driver are assigned to each network channel in each network node (7: [0004] read FIG. 3 shows an example of a time pattern such as can be determined by the unit for setting the configuration parameters 21. First, two time slots are provided for the user 7, followed by a time slot for the third user 9. The two time slots which are represented in a hatched form are marked as blocked by

the hatching, i.e. the bus monitor unit 5 has detected a faulty transmission signal at this time; as a result, the time slot is blocked both for transmission and reception. However, on the other hand, it would also be possible for signal filtering to take place so that the correct signal is generated by means of a filter or a redundant channel.).

16. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Belschner, et al (U.S. Patent 7103805), in view of in view of Riley et al (U.S. Patent 5706289) and in further view of Baek et al (U.S. Patent 5680554)

17. In consideration of claim 2, Belschner, modified Riley teaches of a bus driver activating the transmission stage if there is no blockage of access to the communication medium present, but does not teach of transmission request signal to the bus driver.

18. Baek teaches of transmission request signal to the bus driver (4: [0054] read NRQ represents the basic unit of a data transmission request signal…)

19. It would have been obvious at the time the invention was made by a person of to having ordinary skill in the art to modify the teachings of Belschner, modified Riley with Baek.

20. In this manner, the bus driver will be enabled only when it has data to transmit thus minimizing collision with other bus drivers.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENRY BARON whose telephone number is (571)270-1748. The examiner can normally be reached on 7:30 AM to 5:00 PM E.S.T. Monday to Friday.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. B./
Examiner, Art Unit 2616

/Seema S. Rao/
Supervisory Patent Examiner, Art Unit 2616

HB

1.